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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,021	12/13/2001	Yukiyasu Fukami	NAKI-BQ58	2418
21611 7590 05/18/2007 SNELL & WILMER LLP (OC) 600 ANTON BOULEVARD SUITE 1400 COSTA MESA, CA 92626				
			EXAMINER PYZOCHA, MICHAEL J	
			ART UNIT 2137	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/023,021

Applicant(s)

FUKAMI ET AL.

Examiner

Michael Pyzocha

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 4/27/07
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

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DETAILED ACTION

1. Claims 1-34 are pending.
2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/08/2007 has been entered.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 22-25 and 30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 22-25 related to a program for performing actions, this is merely functional descriptive material, which is not statutory under 35 USC 101 since it is a part of a statutory manufacture or machine (i.e. computer-readable media which was previously part of the claim) (SEE MPEP 2106.01). Claim 30 relates to a computer-readable medium with

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data stored thereon, which relates to non-functional descriptive material as it is a mere arrangement of data, with descriptions as to what this content includes. Even though it is recorded on a computer-readable medium there is no requisite functionality so it is therefore not statutory under 35 USC 101.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 15-21, 24, 25, 28, 29, 33, and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Tsukahara et al. (US 6920222).

As per claims 15, 17, 24, 25, 28, 29, 33, and 34 Tsukahara et al. discloses acquisition means for acquiring content to be scrambled and a plurality of descrambling keys (see column 6 lines 9-17); scramble processing means that selects one of the descrambling keys for each frame of the content, and scrambles the each frame so that the frame can be descrambled by using the descrambling key selected for the frame (see column 6 lines 17-23); attaching means for attaching auxiliary information, which

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is used to generate a list of descrambling keys, wherein the auxiliary information includes (a) information for identifying each of the frames, and (b) each of the descrambling keys selected for the frame (see column 6 lines 9-33); broadcast means for broadcasting the scrambled content including the plurality of scrambled frames to which the auxiliary information has been attached (see column 6 lines 34-47).

As per claims 16 and 18-21, Tsukahara et al. discloses embedding the list of descrambling keys in one or a plurality of pieces of predetermined information and broadcasting this information as an ECM (see column 6 lines 9-33).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-8, 11-14, 22, 23, 26, 27, and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukahara et al. (US 6920222) in view of Darshan et al. (US 7106749).

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As per claims 1, 12, 22, 23, 26, 27, and 30-32, Tsukahara et al. discloses reception means for receiving scrambled content and storage information (see figure 1), wherein (a) the scrambled content is a content which has been scrambled in units of frames so that the frames can be descrambled using descrambling keys that respectively correspond to each of the frames (see column 9 lines 53-67), and (b) the storage information includes a list of the descrambling keys which includes all of the descrambling keys (see column 10 lines 6-22); storage means for storing the received scrambled content and the storages information; list extraction means for extracting the list of descrambling keys from the stored information (see column 10 lines 6-29); descramble processing means for descrambling the scrambled content (see column 10 lines 23-29); reproduction means for reproducing the descrambled content (see column 10 lines 61-64), wherein the normal reproduction mode is a mode which includes a play mode and in which all of the frames are descrambled and reproduced sequentially (see column 10 lines 23-28), the particular reproduction mode is a mode which only predetermined frames selectively extracted from less than all of the frames are descrambled and reproduced (see column 10 lines 29-64), and (a) in normal reproduction mode, said list of extraction means

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extracts all descrambling keys from the list of descrambling keys, descrambles all of the frames and reproduces all of the frames (see column 10 lines 6-28), and (b) in the particular reproduction mode, selectively extracting descrambling keys corresponding to certain frames, descrambling the certain frames and reproducing the frames (see column 10 lines 29-64).

Tsukahara et al. fails to disclose the particular reproduction mode reproduces only the predetermined frames such that the content is reproduced in a different speed.

However, Darshan et al. teaches such a fast forward type mode for descrambling and reproducing frames (see column 4 lines 1-18).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to implement Tsukahara et al.'s inhibit viewing mode as a fast forward mode.

Motivation to do so would have been to handle recorded broadcast content with conditional access (see column 3 lines 1-16).

As per claims 2-8, 11 and 13, the modified Tsukahara et al. and Darshan et al. system discloses the use of TS packets to send and receive the scrambled content (see Darshan et al. column 4 lines 43-53); and the use of ECMs for storing the list of decryption keys (see Tsukahara et al. column 6 lines 9-33).

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8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Tsukahara et al. and Darshan et al. system as applied to claim 8 above, and further in view of Kahn (US 6853728).

As per claim 9, the modified Tsukahara et al. and Darshan et al. system fails to disclose the packet specifying information is one of Continuity Counter (CC), the number of TS packets, a cumulative amount of data, a relative reproduction time, and a scrambling key identifier, the scrambled content extraction means extracts, as the packet specifying information, one of the Continuity Counter (CC), the number of TS packets, the cumulative amount of data, the relative reproduction time, and the scrambling key identifier.

Kahn et al. in analogous art, however, discloses the packet specifying information is one of Continuity Counter (CC), the number of TS packets, a cumulative amount of data, a relative reproduction time, and a scrambling key identifier, (Col. 6, Lines 30-46, Kahn) the scrambled content extraction means extracts, as the packet specifying information, one of the Continuity Counter (CC), the number of TS packets, the cumulative amount of data, the relative reproduction time, and the scrambling key identifier, (Col. 6, lines 30-46)

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Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the Tsukahara et al. and Darshan et al. system to include the packet specifying information is one of Continuity Counter (CC), the number of TS packets, a cumulative amount of data, a relative reproduction time, and a scrambling key identifier; and the scrambled content extraction means extracts, as the packet specifying information, one of the Continuity Counter (CC), the number of TS packets, the cumulative amount of data, the relative reproduction time, and the scrambling key identifier.

This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by, Kahn et al. (Col. 6, Lines 26-27) in order to resemble the packets to regenerate the program material.

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Tsukahara et al. and Darshan et al. system as applied to claim 1 above, and further in view of Ando (US 20030133699).

As per claim 10, the Tsukahara et al. and Darshan et al. system discloses a reception apparatus wherein the reception means receives (a) the predetermined unit of scrambled content (see Tsukahara figure 1) and the storage means sequentially stores the received content, wherein the descramble processing

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means includes: scrambled content extraction means for, when performing particular reproduction processes, extracting the predetermined unit of scrambled content and I picture information from one of the TS packets stored in the storage means; descrambling key extraction means for extracting a descrambling key from the List of descrambling keys, only when the extracted predetermined unit of scrambled content consists of a portion of an I picture/an I picture; and descrambling means for descrambling the extracted predetermined unit of scrambled content using the extracted descrambling key (see Tsukahara as applied above and Darshan et al. column 4 lines 43-53 and column 9 lines 14-26).

The modified Tsukahara et al. and Darshan et al. system fails to disclose unscrambled I picture information, wherein the I picture information indicates whether the TS packet corresponding to the information consists of a portion of an I picture/an I picture or not; and I picture judgment means for judging whether the extracted predetermined unit of scrambled content consists of a portion of an I picture/an I picture or not, based on the extracted I picture information.

Ando et al. in analogous art, however, discloses a system to manage digital TV broadcast data that uses a signal or radio wave that is segmented into a plurality of sets of TS packets to

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locate an I-picture at the head of each set. The I-picture is always located at the head, the I-picture address need not be described, and only the I-picture end address can be described. (Page 7, paragraphs 157 and 159; Figure 11) Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the Tsukahara et al. and Darshan et al. system to include unscrambled I picture information, wherein the I picture information indicates whether the TS packet corresponding to the information consists of a portion of an I picture/an I picture or not; and I picture judgment means for judging whether the extracted predetermined unit of scrambled content consists of a portion of an I picture/an I picture or not, based on the extracted I picture information. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by, Ando et al. (Page 1, paragraph 21) in order to provide a system that can efficiently record a transport packet in a streamer which uses media capable of random access.

Response to Arguments

10. Applicant's arguments with respect to claims 1-34 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Pyzocha whose telephone number is (571) 272-3875. The examiner can normally be reached on 7:00am - 4:30pm first Fridays of the bi-week off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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